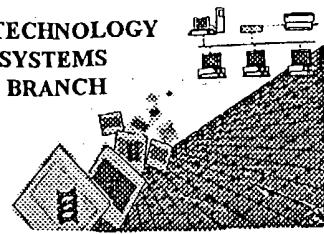


BIOTECHNOLOGY  
SYSTEMS  
BRANCH



**RAW SEQUENCE LISTING**  
**ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/817,530  
Source: FWO  
Date Processed by STIC: 10/5/04

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

**FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:**

**<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>**

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. **EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)**
2. **U.S. Postal Service: Commissioner for Patents, P.O. Box-1450, Alexandria, VA 22313-1450**
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04): U.S. Patent and Trademark Office, 220 20<sup>th</sup> Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202**

Revised 05/17/04



IFWO

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/817,530

DATE: 10/05/2004

TIME: 10:34:02

Input Set : A:\Sequence.List.for.10817530.txt

Output Set: N:\CRF4\10052004\J817530.raw

3 <110> APPLICANT: Braun, Werner  
 4 Mathura, Venkatarajan S.  
 5 Schein, Catherine H.  
 7 <120> TITLE OF INVENTION: PHYSICAL-CHEMICAL PROPERTY BASED SEQUENCE MOTIFS AND METHODS  
 8 REGARDING SAME  
 10 <130> FILE REFERENCE: 265.00400101  
 12 <140> CURRENT APPLICATION NUMBER: 10/817,530  
 13 <141> CURRENT FILING DATE: 2004-04-02  
 15 <150> PRIOR APPLICATION NUMBER: US 60/460,769  
 16 <151> PRIOR FILING DATE: 2003-04-04  
 18 <160> NUMBER OF SEQ ID NOS: 5  
 20 <170> SOFTWARE: PatentIn version 3.2  
 22 <210> SEQ ID NO: 1  
 23 <211> LENGTH: 10  
 24 <212> TYPE: PRT  
 C--> 25 <213> ORGANISM: ARTIFICIAL MEMBER OF DNase-I SUPERFAMILY  
 W--> 27 <220> FEATURE:  
 W--> 27 <223> OTHER INFORMATION: *move down to <223> line*  
 W--> 27 <400> 1  
 29 Pro Asp Ile Leu Cys Leu Gln Glu Thr Lys  
 30 1 5 10  
 33 <210> SEQ ID NO: 2  
 34 <211> LENGTH: 275  
 35 <212> TYPE: PRT  
 C--> 36 <213> ORGANISM: ARTIFICIAL MEMBER OF DNase-I SUPERFAMILY  
 W--> 38 <220> FEATURE:  
 W--> 38 <223> OTHER INFORMATION:  
 W--> 38 <400> 2  
 40 Leu Tyr Glu Asp Pro Pro Asp Gln Lys Thr Ser Pro Ser Gly Lys Pro  
 41 1 5 10 15  
 44 Ala Thr Leu Lys Ile Cys Ser Trp Asn Val Asp Gly Leu Arg Ala Trp  
 45 20 25 30  
 48 Ile Lys Lys Lys Gly Leu Asp Trp Val Lys Glu Glu Ala Pro Asp Ile  
 49 35 40 45  
 52 Leu Cys Leu Gln Glu Thr Lys Cys Ser Glu Asn Lys Leu Pro Ala Glu  
 53 50 55 60  
 56 Leu Gln Glu Leu Pro Gly Leu Ser His Gln Tyr Trp Ser Ala Pro Ser  
 57 65 70 75 80  
 60 Asp Lys Glu Gly Tyr Ser Gly Val Gly Leu Leu Ser Arg Gln Cys Pro  
 61 85 90 95  
 64 Leu Lys Val Ser Tyr Gly Ile Gly Asp Glu Glu His Asp Gln Glu Gly  
 65 100 105 110  
 68 Arg Val Ile Val Ala Glu Phe Asp Ser Phe Val Leu Val Thr Ala Tyr

*pp 1-4, 6*  
*Does Not Comply*  
*Corrected Diskette Needed*  
*Per 1.823,1 Sequence*  
*Rules, the explanation*  
*for Artificial Sequence*  
*goes on <223>*  
*line. Please*  
*insert a <220>*  
*above <223>.*  
*Do not insert*  
*response to*  
*<220> - it is*  
*a header only.*  
*See p. 6 for*  
*more explanation.*

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/817,530

DATE: 10/05/2004  
TIME: 10:34:02

Input Set : A:\Sequence.List.for.10817530.txt  
Output Set: N:\CRF4\10052004\J817530.raw

69 115 120 125  
72 Val Pro Asn Ala Gly Arg Gly Leu Val Arg Leu Glu Tyr Arg Gln Arg  
73 130 135 140  
76 Trp Asp Glu Ala Phe Arg Lys Phe Leu Lys Gly Leu Ala Ser Arg Lys  
77 145 150 155 160  
80 Pro Leu Val Leu Cys Gly Asp Leu Asn Val Ala His Glu Glu Ile Asp  
81 165 170 175  
84 Leu Arg Asn Pro Lys Gly Asn Lys Lys Asn Ala Gly Phe Thr Pro Gln  
85 180 185 190  
88 Glu Arg Gln Gly Phe Gly Glu Leu Leu Gln Ala Val Pro Leu Ala Asp  
89 195 200 205  
92 Ser Phe Arg His Leu Tyr Pro Asn Thr Pro Tyr Ala Tyr Thr Phe Trp  
93 210 215 220  
96 Thr Tyr Met Met Asn Ala Arg Ser Lys Asn Val Gly Trp Arg Leu Asp  
97 225 230 235 240  
100 Tyr Phe Leu Leu Ser His Ser Leu Leu Pro Ala Leu Cys Asp Ser Lys  
101 245 250 255  
104 Ile Arg Ser Lys Ala Leu Gly Ser Asp His Cys Pro Ile Thr Leu Tyr  
105 260 265 270  
108 Leu Ala Leu  
109 275  
112 <210> SEQ ID NO: 3  
113 <211> LENGTH: 268  
114 <212> TYPE: PRT

C--> 115 <213> ORGANISM: ARTIFICIAL MEMBER OF DNase-I SUPERFAMILY

W--> 117 <220> FEATURE:

W--> 117 <223> OTHER INFORMATION: ↴

W--> 117 <400> 3

119 Met Lys Phe Val Ser Phe Asn Ile Asn Gly Leu Arg Ala Arg Pro His  
120 1 5 10 15  
123 Gln Leu Glu Ala Ile Val Glu Lys His Gln Pro Asp Val Ile Gly Leu  
124 20 25 30  
127 Gln Glu Thr Lys Val His Asp Asp Met Phe Pro Leu Glu Glu Val Ala  
128 35 40 45  
131 Lys Leu Gly Tyr Asn Val Phe Tyr His Gly Gln Lys Gly His Tyr Gly  
132 50 55 60  
135 Val Ala Leu Leu Thr Lys Glu Thr Pro Ile Ala Val Arg Arg Gly Phe  
136 65 70 75 80  
139 Pro Gly Asp Asp Glu Glu Ala Gln Arg Arg Ile Ile Met Ala Glu Ile  
140 85 90 95  
143 Pro Ser Leu Leu Gly Asn Val Thr Val Ile Asn Gly Tyr Phe Pro Gln  
144 100 105 110  
147 Gly Glu Ser Arg Asp His Pro Ile Lys Phe Pro Ala Lys Ala Gln Phe  
148 115 120 125  
151 Tyr Gln Asn Leu Gln Asn Tyr Leu Glu Thr Glu Leu Lys Arg Asp Asn  
152 130 135 140  
155 Pro Val Leu Ile Met Gly Asp Met Asn Ile Ser Pro Thr Asp Leu Asp  
156 145 150 155 160  
159 Ile Gly Ile Gly Glu Asn Arg Lys Arg Trp Leu Arg Thr Gly Lys

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/817,530

DATE: 10/05/2004  
TIME: 10:34:02

Input Set : A:\Sequence.List.for.10817530.txt  
Output Set: N:\CRF4\10052004\J817530.raw

160 165 170 175  
 163 Cys Ser Phe Leu Pro Glu Glu Arg Glu Trp Met Asp Arg Leu Met Ser  
 164 180 185 190  
 167 Trp Gly Leu Val Asp Thr Phe Arg His Ala Asn Pro Gln Thr Ala Asp  
 168 195 200 205  
 171 Arg Phe Ser Trp Phe Asp Tyr Arg Ser Lys Gly Phe Asp Asp Asn Arg  
 172 210 215 220  
 175 Gly Leu Arg Ile Asp Leu Leu Ala Ser Gln Pro Leu Ala Glu Cys  
 176 225 230 235 240  
 179 Cys Val Glu Thr Gly Ile Asp Tyr Glu Ile Arg Ser Met Glu Lys Pro  
 180 245 250 255  
 183 Ser Asp His Ala Pro Val Trp Ala Thr Phe Arg Arg  
 184 260 265  
 187 <210> SEQ ID NO: 4  
 188 <211> LENGTH: 258  
 189 <212> TYPE: PRT  
 -> 190 <213> ORGANISM: ARTIFICIAL MEMBER OF DNase-I SUPERFAMILY  
 -> 192 <220> FEATURE:  
 -> 192 <223> OTHER INFORMATION:  
 -> 192 <400> 4  
 194 Leu Lys Ile Ala Ala Phe Asn Ile Arg Thr Phe Gly Glu Thr Lys Met  
 195 1 5 10 15  
 198 Ser Asn Ala Thr Leu Ala Ser Tyr Ile Val Arg Ile Val Arg Arg Tyr  
 199 20 25 30  
 202 Asp Ile Val Leu Ile Gln Glu Val Arg Asp Ser His Leu Val Ala Val  
 203 35 40 45  
 206 Gly Lys Leu Leu Asp Tyr Leu Asn Gln Asp Asp Pro Asn Thr Tyr His  
 207 50 55 60  
 210 Tyr Val Val Ser Glu Pro Leu Gly Arg Asn Ser Tyr Lys Glu Arg Tyr  
 211 65 70 75 80  
 214 Leu Phe Leu Phe Arg Pro Asn Lys Val Ser Val Leu Asp Thr Tyr Gln  
 215 85 90 95  
 218 Tyr Asp Asp Gly Cys Cys Gly Asn Asp Ser Phe Ser Arg Glu Pro Ala  
 219 100 105 110  
 222 Val Val Lys Phe Ser Ser His Ser Thr Lys Val Lys Glu Phe Ala Ile  
 223 115 120 125  
 226 Val Ala Leu His Ser Ala Pro Ser Asp Ala Val Ala Glu Ile Asn Ser  
 227 130 135 140  
 230 Leu Tyr Asp Val Tyr Leu Asp Val Gln Gln Lys Trp His Leu Asn Asp  
 231 145 150 155 160  
 234 Val Met Leu Met Gly Asp Phe Asn Ala Asp Cys Ser Tyr Val Thr Ser  
 235 165 170 175  
 238 Ser Gln Trp Ser Ser Ile Arg Leu Arg Thr Ser Ser Thr Phe Gln Trp  
 239 180 185 190  
 242 Leu Ile Pro Asp Ser Ala Asp Thr Thr Ala Thr Ser Thr Asn Cys Ala  
 243 195 200 205  
 246 Tyr Asp Arg Ile Val Val Ala Gly Ser Leu Leu Gln Ser Ser Val Val  
 247 210 215 220  
 250 Pro Gly Ser Ala Ala Pro Phe Asp Phe Gln Ala Ala Tyr Gly Leu Ser

## RAW SEQUENCE LISTING

DATE: 10/05/2004

PATENT APPLICATION: US/10/817,530

TIME: 10:34:02

Input Set : A:\Sequence.List.for.10817530.txt  
 Output Set: N:\CRF4\10052004\J817530.raw

251 225 230 235 240  
 254 Asn Glu Met Ala Leu Ala Ile Ser Asp His Tyr Pro Val Glu Val Thr  
 255 245 250 255  
 258 Leu Thr  
 262 <210> SEQ ID NO: 5  
 263 <211> LENGTH: 336  
 264 <212> TYPE: PRT  
 C--> 265 <213> ORGANISM: ARTIFICIAL MEMBER OF DNase-I SUPERFAMILY  
 W--> 267 <220> FEATURE:  
 W--> 267 <223> OTHER INFORMATION:  
 W--> 267 <400> 5  
 269 Tyr Asp Pro Ile His Glu Tyr Val Asn His Glu Leu Arg Lys Arg Glu  
 270 1 5 10 15  
 273 Asn Glu Phe Ser Glu His Lys Asn Val Lys Ile Phe Val Ala Ser Tyr  
 274 20 25 30  
 277 Asn Leu Asn Gly Cys Ser Ala Thr Thr Lys Leu Glu Asn Trp Leu Phe  
 278 35 40 45  
 281 Pro Glu Asn Thr Pro Leu Ala Asp Ile Tyr Val Val Gly Phe Gln Glu  
 282 50 55 60  
 285 Ile Val Gln Leu Thr Ser Ala Asp Pro Ala Lys Arg Arg Glu Trp Glu  
 286 65 70 75 80  
 289 Ser Cys Val Lys Arg Leu Leu Asn Gly Lys Cys Thr Ser Gly Pro Gly  
 290 85 90 95  
 293 Tyr Val Gln Leu Arg Ser Gly Gln Leu Val Gly Thr Ala Leu Met Ile  
 294 100 105 110  
 297 Phe Cys Lys Glu Ser Cys Leu Pro Ser Ile Lys Asn Val Glu Gly Thr  
 298 115 120 125  
 301 Val Lys Lys Thr Gly Leu Gly Asn Lys Gly Ala Val Ala Ile Arg Phe  
 302 130 135 140  
 305 Asp Tyr Glu Asp Thr Gly Leu Cys Phe Ile Thr Ser His Leu Ala Ala  
 306 145 150 155 160  
 309 Gly Tyr Thr Asn Tyr Asp Glu Arg Asp His Asp Tyr Arg Thr Ile Ala  
 310 165 170 175  
 313 Ser Gly Leu Arg Phe Arg Arg Gly Arg Ser Ile Phe Asn His Asp Tyr  
 314 180 185 190  
 317 Val Val Trp Phe Gly Asp Phe Asn Tyr Arg Ile Ser Leu Thr Tyr Glu  
 318 195 200 205  
 321 Glu Val Val Pro Cys Ile Ala Gln Gly Lys Leu Ser Tyr Leu Phe Glu  
 322 210 215 220  
 325 Tyr Asp Gln Leu Asn Lys Gln Met Leu Thr Gly Lys Val Phe Pro Phe  
 326 225 230 235 240  
 329 Phe Ser Glu Leu Pro Ile Thr Phe Pro Pro Thr Tyr Lys Phe Asp Ile  
 330 245 250 255  
 333 Gly Thr Asp Ile Tyr Asp Thr Ser Asp Lys His Arg Val Pro Ala Trp  
 334 260 265 270  
 337 Thr Asp Arg Ile Leu Tyr Arg Gly Glu Leu Val Pro His Ser Tyr Gln  
 338 275 280 285  
 341 Ser Val Pro Leu Tyr Tyr Ser Asp His Arg Pro Ile Tyr Ala Thr Tyr  
 342 290 295 300

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/817,530

DATE: 10/05/2004

TIME: 10:34:02

Input Set : A:\Sequence.List.for.10817530.txt

Output Set: N:\CRF4\10052004\J817530.raw

345 Glu Ala Asn Ile Val Lys Val Asp Arg Glu Lys Lys Lys Ile Leu Phe  
346 305 310 315 320  
349 Glu Glu Leu Tyr Asn Gln Arg Lys Gln Glu Val Arg Asp Ala Ser Gln  
350 325 330 335

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/817,530

DATE: 10/05/2004  
TIME: 10:34:03

*err 817530* | Input Set : A:\Sequence.List.for.10817530.txt  
Output Set: N:\CRF4\10052004\J817530.raw

Use of <220> Feature(NEW RULES):

Sequence(s) are missing the <220> Feature and associated headings.

Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or "Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp.29631-32)  
(Sec.1.823 of new Rules)

Seq#:1,2,3,4,5

## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/817,530

DATE: 10/05/2004

TIME: 10:34:03

Input Set : A:\Sequence.List.for.10817530.txt

Output Set: N:\CRF4\10052004\J817530.raw

L:25 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1  
L:27 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:1, <213>  
ORGANISM:Artificial Sequence  
L:27 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:1, <213>  
ORGANISM:Artificial Sequence  
L:27 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:27  
L:36 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2  
L:38 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:2, <213>  
ORGANISM:Artificial Sequence  
L:38 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:2, <213>  
ORGANISM:Artificial Sequence  
L:38 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:2,Line#:38  
L:115 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3  
L:117 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:3, <213>  
ORGANISM:Artificial Sequence  
L:117 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:3, <213>  
ORGANISM:Artificial Sequence  
L:117 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3,Line#:117  
L:190 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4  
L:192 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:4, <213>  
ORGANISM:Artificial Sequence  
L:192 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:4, <213>  
ORGANISM:Artificial Sequence  
L:192 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:4,Line#:192  
L:265 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5  
L:267 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:5, <213>  
ORGANISM:Artificial Sequence  
L:267 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:5, <213>  
ORGANISM:Artificial Sequence  
L:267 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:267